

Mechanical Engineering | Technology Offer

## Omnidirectional drive system for mobile robots

### State of the art

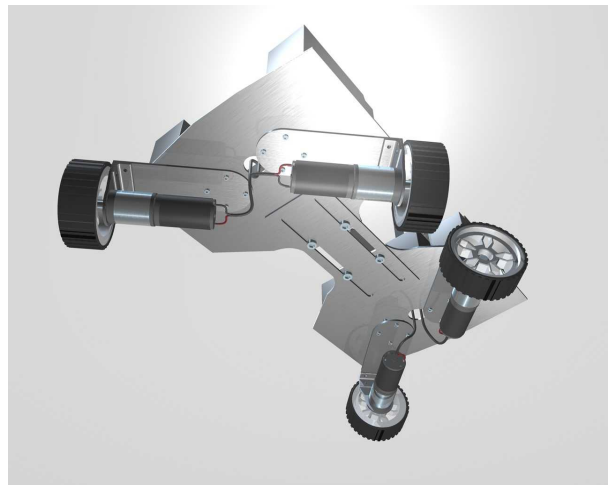
Mobile robots are used in a wide range of applications. The number of autonomous and remote-controlled systems is constantly increasing. These systems demand a maximum freedom of movement even under constricted conditions. Omnidirectional drives enable to follow any desired course and to start towards any direction independent of the vehicles orientation. Currently available systems need to have a special type of wheels. Unfortunately, these wheels come along with some disadvantages, like impreciseness, minor efficiency and very limited driving speed.

### Innovation

A separate steering mechanism becomes redundant! Each wheel is provided with a separately calculated torque. Therefore the position of a wheel can be individually set. Sensors are continuously observing the vehicles movements to correct possible deviations. Because of being able to use standard wheels, there are no restrictions to the field of application. The extraordinary maneuverability makes the system ideal to be used for any kind of robots.

### Your advantages at a glance

- no steering mechanism needed
- weight saving
- extremely manoeuvrable
- no shunting required
- versatile
- fast and precise



### Patent-Situation

Patent pending. Application not yet published. International applications targeted.

### Commercialization

The TLB GmbH is seeking companies who may be interested in acquiring a license for this technology.

For further information contact

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